

**Disposition of Radioactivity 72 Hours Following Oral Gavage Administration  
of 400 mg/kg [<sup>14</sup>C]DTBBA to Male Harlan Sprague Dawley Rats (Group I)<sup>a</sup>**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE <sup>b</sup>	Cage Rinse CPDE	Volatile Organics CPDE	Feces CPDE	CO <sub>2</sub> CPDE	GI Content	Total CPDE
4	20.9 ± 5.8	7.51 ± 3.00	—	0.0313 ± 0.0041	0.221 ± 0.049	—	28.6
8	38.6 ± 6.6	14.8 ± 3.5	—	0.0732 ± 0.0174	0.452 ± 0.064	—	53.9
12	45.9 ± 6.4	18.1 ± 4.4	—	0.101 ± 0.017	0.687 ± 0.065	—	64.7
24	50.2 ± 5.1	18.5 ± 4.5	34.6 ± 23.5	0.122 ± 0.020	0.932 ± 0.083	—	104
48	50.9 ± 5.0	18.6 ± 4.5	36.2 ± 23.6	0.146 ± 0.019	1.17 ± 0.14	—	107
72 <sup>c</sup>	51.1 ± 4.9	19.0 ± 4.6	36.8 ± 23.3	0.168 ± 0.021	1.40 ± 0.16	0.0524 ± 0.0261	109

Disposition in Tissues

Tissue	nmol-eq/g Mean	nmol-eq/g SD	TBR <sup>e</sup> Mean	TBR SD	Percent Recovery Mean	Percent Recovery SD
Blood <sup>d</sup>	2.81	0.95	unity	—	0.0277	0.0096
Adipose <sup>d</sup>	2.50	0.30	0.970	0.344	0.0233	0.0024
Muscle <sup>d</sup>	1.31	0.52	0.485	0.178	0.0702	0.0269
Skin <sup>d</sup>	2.87	0.52	1.13	0.49	0.0724	0.0110
Brain	0.678	0.122	0.271	0.120	0.00053	0.00016
Heart	1.03	0.20	0.412	0.205	0.00045	0.00008
Kidneys	3.20	0.48	1.25	0.48	0.00278	0.00030
Liver	4.18	0.46	1.66	0.67	0.0217	0.0030
Lung	1.47	0.23	0.586	0.247	0.00091	0.00015
Spleen	1.09	0.23	0.434	0.212	0.00032	0.00006
Adrenals	12.3	12.2	4.47	3.58	0.00016	0.00005
Thymus	0.841	0.227	0.336	0.186	0.00020	0.00004
Thyroid	52.2	53.7	24.5	30.9	0.00008	0.00004
Urinary Bladder	3.55	1.92	1.39	0.58	0.00008	0.00004
Pancreas	1.12	0.33	0.421	0.135	0.00036	0.00018
Testes	0.821	0.508	0.289	0.119	0.00134	0.00092
Cecum	3.92	1.76	1.41	0.51	0.00099	0.00035
Large Intestine	2.69	0.66	1.02	0.31	0.00141	0.00033
Small Intestine	1.67	0.24	0.671	0.305	0.00308	0.00107
Stomach	1.24	0.33	0.479	0.203	0.00070	0.00015

Disposition Summary—Dose Recovered (%)

Sample	Percent Recovered Mean	Percent Recovered SD
Urine + Cage Rinse	70.2	3.1
Urine	51.1	4.9
Cage Rinse	19.0	4.6
Feces	36.8	23.3
Volatile Organics	0.168	0.021
CO <sub>2</sub>	1.40	0.16
GI Content	0.0524	0.0261
Carcass	0.138	0.077
Tissues	0.366	0.078
<b>Total Recovered</b>	<b>109</b>	<b>23</b>

<sup>a</sup>All values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 400 mg DTBBA/kg. The actual dose delivered was 356 ± 15 mg/kg (44.9 ± 1.6 µCi).

<sup>b</sup>CPDE = Cumulative percent dose excreted

<sup>c</sup>24 hour (h) urine collection included urine present in the urinary bladder at study termination.

<sup>d</sup>Tissue weights for the dispersed tissues were calculated using the following percentages of body weight: adipose 7.0%, blood 7.4%, muscle 40.4%, and skin 19% (International Life Sciences Institute, 1994).

<sup>e</sup>TBR = tissue to blood ratio